



# Launch Mission Execution Forecast

**Mission:** Falcon 9 Starlink 4-7

**Issued:** 1 Feb 2022 / 0830L (1330Z)

**Valid:** 2 Feb 2022 / 1641 – 1701 (2141 – 2201Z)



**Forecast Discussion:** A large area of high pressure over the eastern US will continue building southwards across the Florida peninsula through the remainder of the day. The tighter pressure gradient will bring an increase in onshore flow, which will continue into Wednesday along with more low level cloud cover. There will be a small chance for an Atlantic shower going into Wednesday, but the concern for the afternoon launch window remains very low. The main threat during the window will be Cumulus Clouds.

There will be little change in the pattern into Thursday, with breezy onshore flow and increasing moisture bringing a few more Atlantic showers. The threat for showers will remain low, but the increase in cloud cover will bring a corresponding increase in the threat for Cumulus Cloud Rule violations.

Launch Day	Probability of Violating Weather Constraints							
	20%	Primary Concerns: Cumulus Cloud Rule						
	Weather Conditions					Additional Risk Criteria		
	Weather/Visibility:	None / 7 mi.	Type	Coverage	Base (ft)	Tops (ft)	Upper-Level Wind Shear:	Low
	Temp/Humidity:	70°F / 66%	Cumulus	Scattered	3,500	8,000	Booster Recovery Weather:	Low
24-Hour Delay	Liftoff Winds (200'):	120° 10 - 15 mph	Cirrus	Scattered	30,000	35,000	Solar Activity:	Low
	Probability of Violating Weather Constraints							
	30%	Primary Concerns: Cumulus Cloud Rule						
	Weather Conditions						Additional Risk Criteria	
	Weather/Visibility:	None / 7 mi.	Type	Coverage	Base (ft)	Tops (ft)	Upper-Level Wind Shear:	Low
24-Hour Delay	Temp/Humidity:	73°F / 68%	Cumulus	Scattered	3,500	10,000	Booster Recovery Weather:	Moderate
	Liftoff Winds (200'):	140° 12 - 17 mph	Cirrus	Scattered	25,000	30,000	Solar Activity:	Low
	<i>Note: The Probability of Violation (POV) is the chance that a Lightning Launch Commit Criteria (LLCC) or certain user constraints (surface winds, precipitation, and temperatures, etc.) will be violated during the launch window. It does not take into account upper-level wind shear, booster recovery weather, and solar activity.</i>							
Next Forecast Will Be Issued		As Needed						